



May 19, 2017

Public Health Preparedness and Situational Awareness Report: #2017:19 Reporting for the week ending 5/13/17 (MMWR Week #19)

CURRENT HOMELAND SECURITY THREAT LEVELS

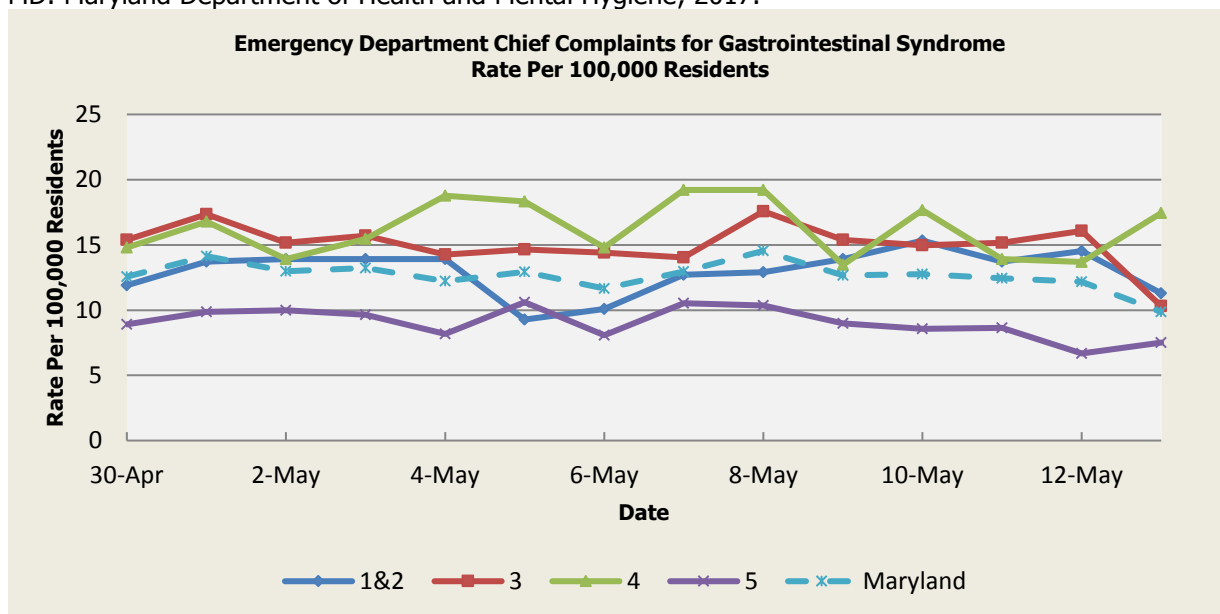
National: No Active Alerts

Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

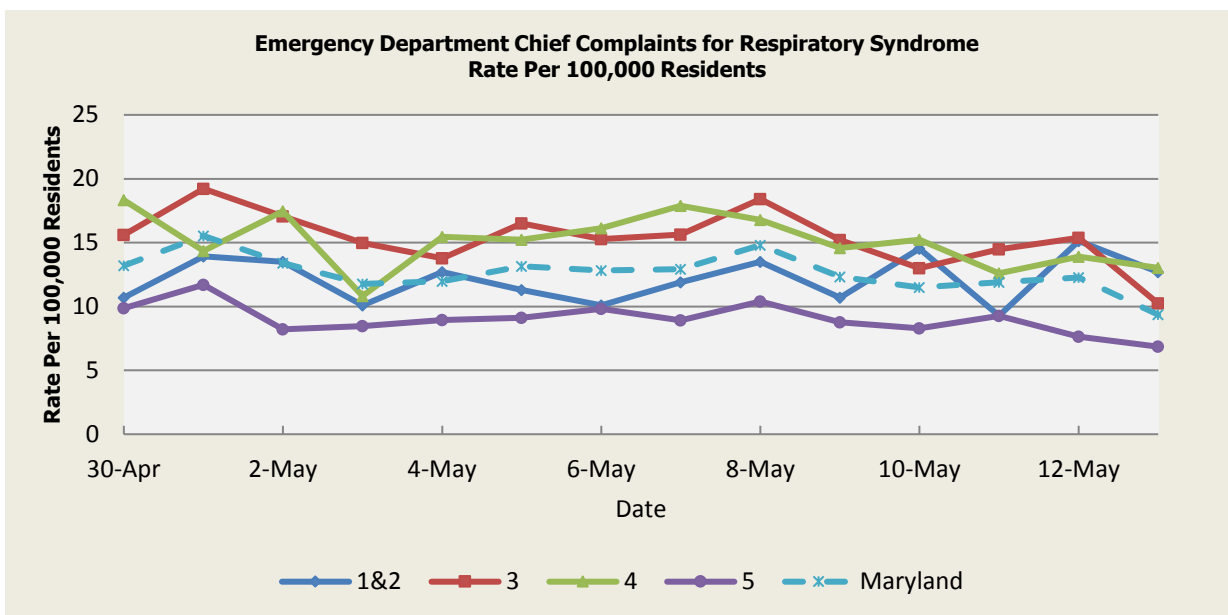
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health and Mental Hygiene; 2017.



There were no Gastrointestinal Syndrome outbreak reported this week.

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.85	15.03	15.35	10.25	13.04
Median Rate*	12.91	14.80	15.02	10.22	12.95

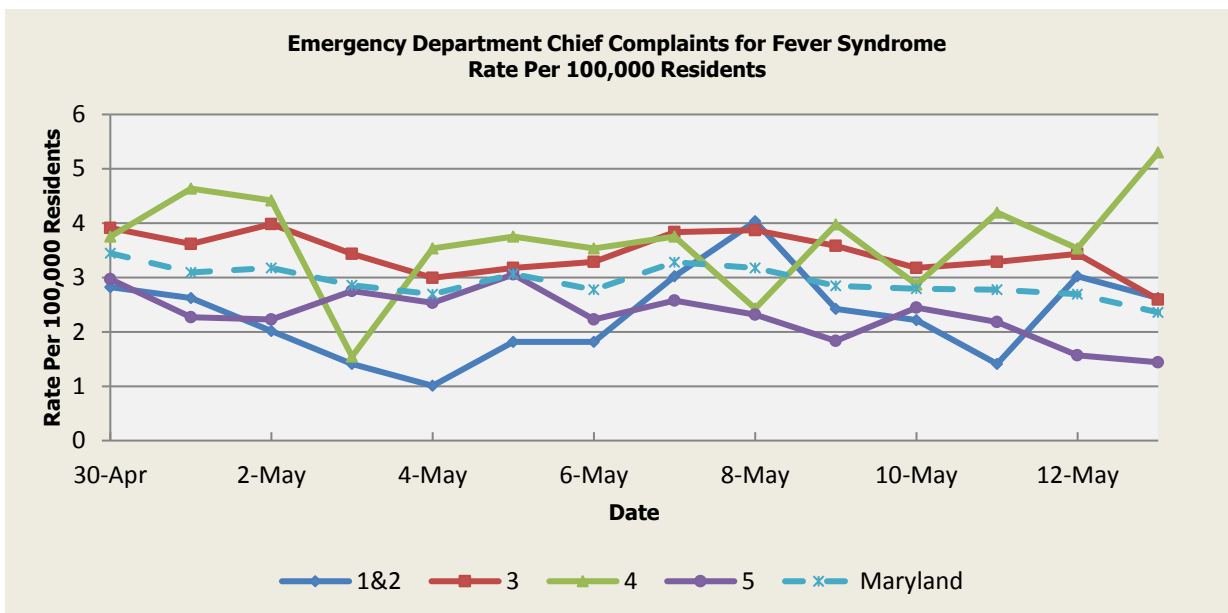
* Per 100,000 Residents



There were no Respiratory Syndrome outbreaks reported this week.

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.99	14.38	14.27	9.91	12.46
Median Rate*	11.70	13.88	13.91	9.65	12.05

* Per 100,000 Residents

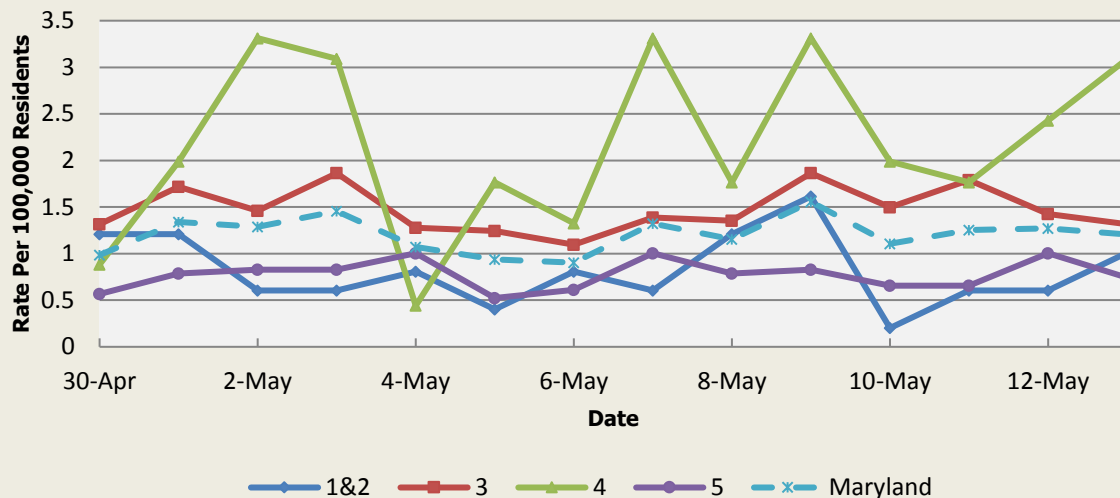


There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.01	3.85	3.96	3.07	3.49
Median Rate*	2.82	3.76	3.75	2.97	3.40

Per 100,000 Residents

Emergency Department Chief Complaints for Localized Lesion Syndrome Rate Per 100,000 Residents



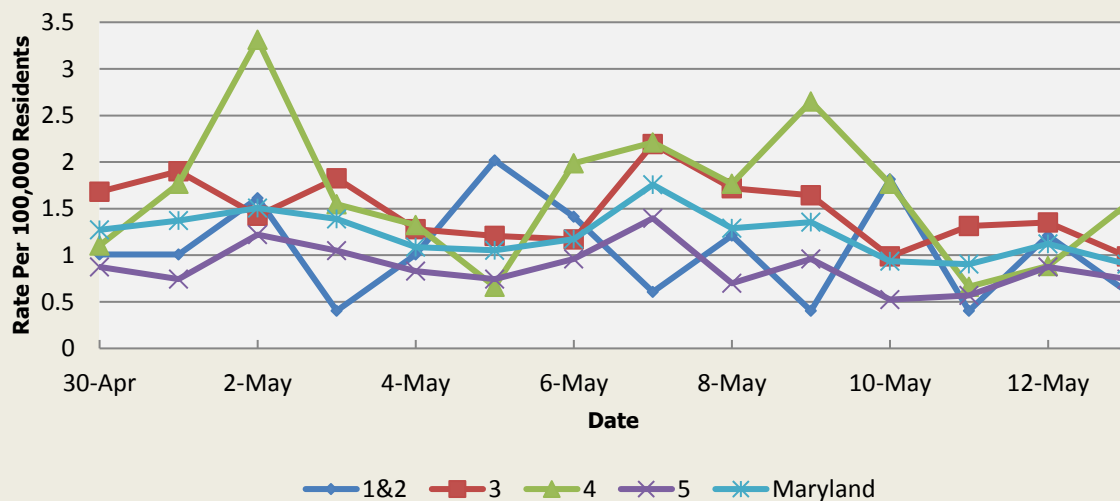
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.04	1.88	2.02	0.96	1.47
Median Rate*	1.01	1.83	1.99	0.92	1.42

* Per 100,000 Residents

Emergency Department Chief Complaints for Rash Syndrome Rate Per 100,000 Residents



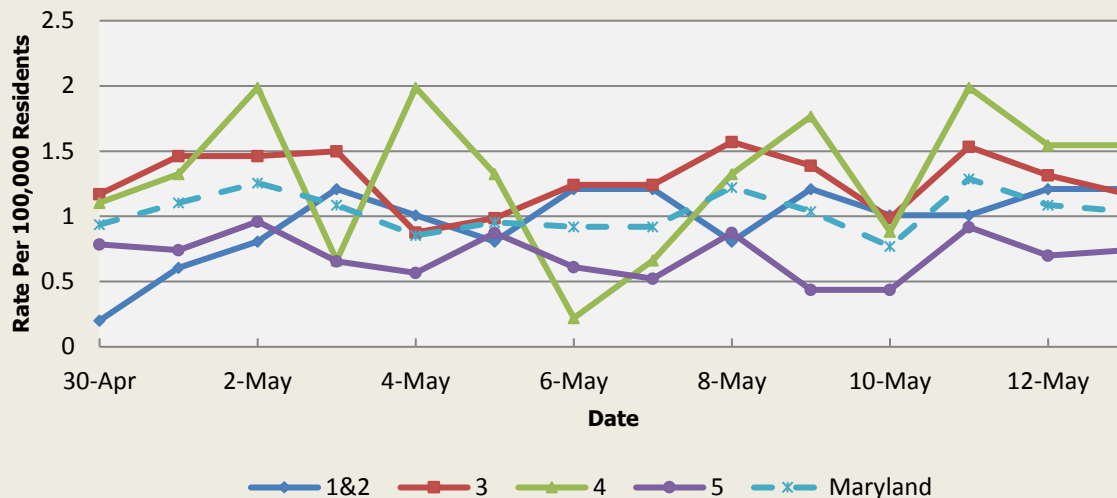
There was one (1) Rash Syndrome outbreak reported this week: one (1) outbreak of Hand, Foot, and Mouth Disease associated with a Daycare Center (Region 5).

Rash Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.24	1.74	1.76	1.02	1.43
Median Rate*	1.21	1.68	1.77	1.00	1.39

* Per 100,000 Residents

Emergency Department Chief Complaints for Neurological Syndrome Rate Per 100,000 Residents



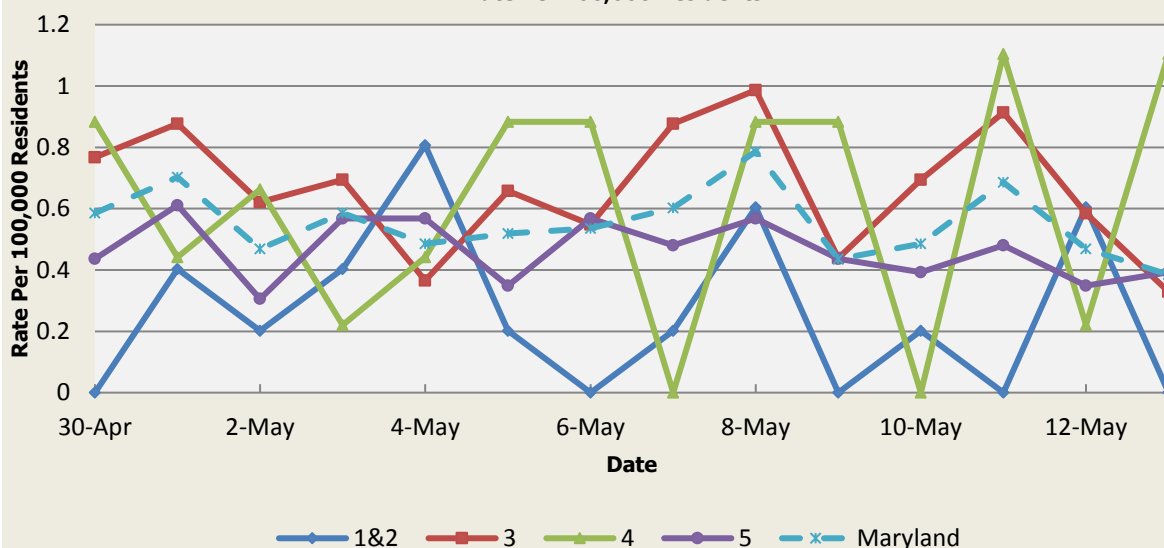
There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.65	0.79	0.68	0.50	0.66
Median Rate*	0.60	0.69	0.66	0.48	0.59

* Per 100,000 Residents

Emergency Department Chief Complaints for Severe Illness or Death Syndrome Rate Per 100,000 Residents



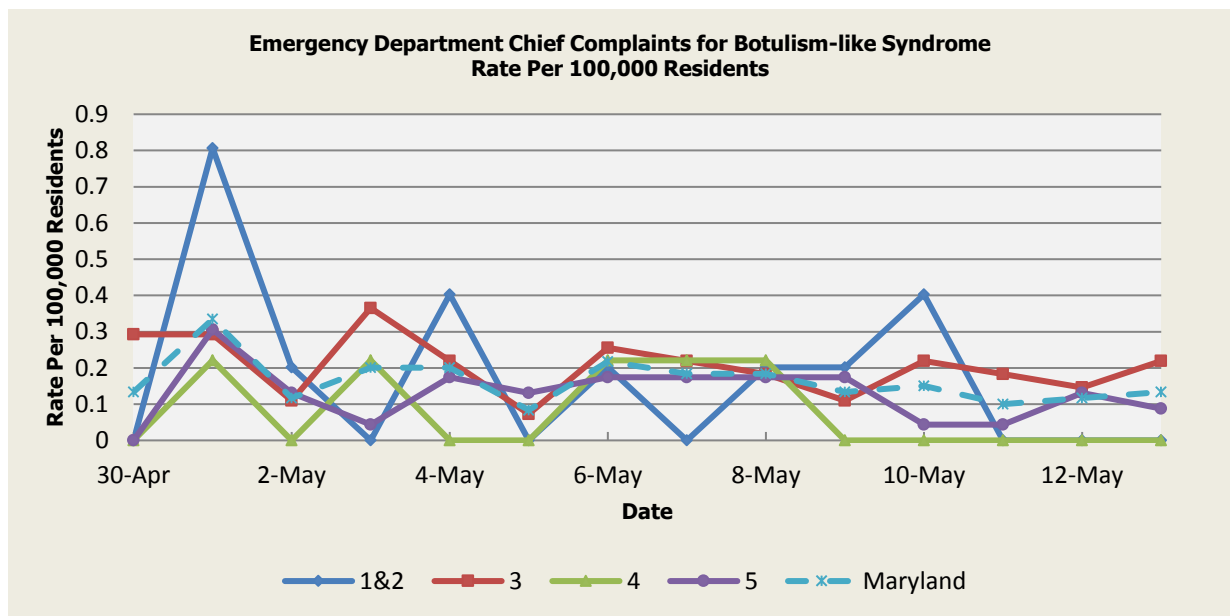
There were no Severe Illness or Death Syndrome outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.64	0.92	0.80	0.46	0.71
Median Rate*	0.60	0.91	0.66	0.44	0.70

* Per 100,000 Residents

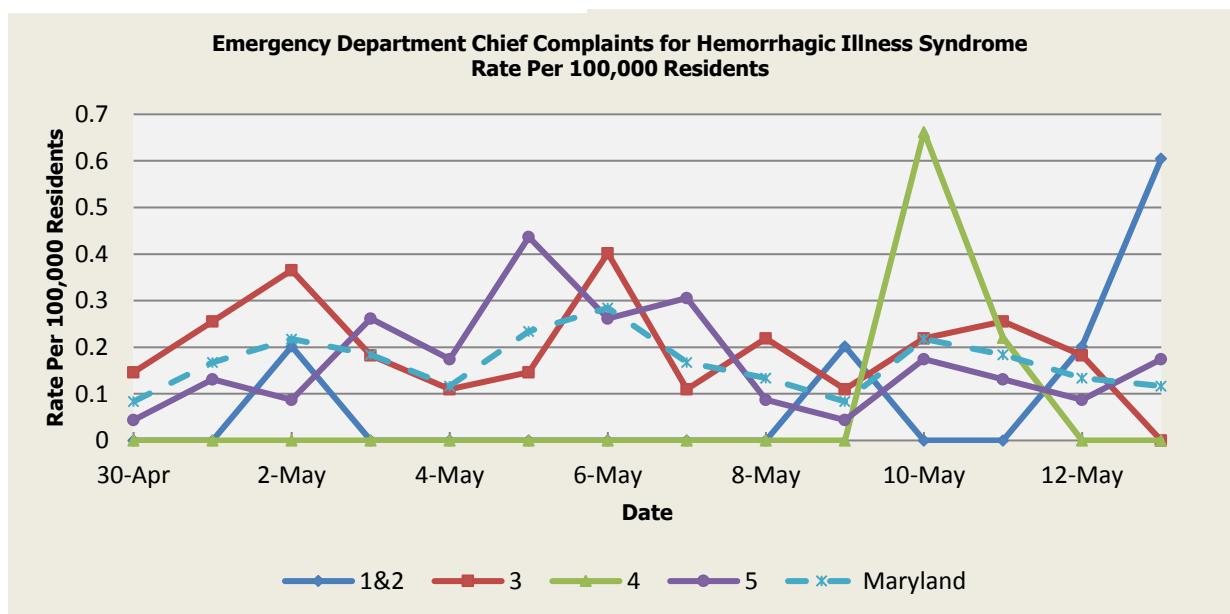
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 04/30 (Region 3), 05/01 (Regions 1&2,3,4,5), 05/02 (Regions 1&2,5), 05/03 (Regions 3,4), 05/04 (Regions 1&2,3,5), 05/05 (Region 5), 05/06 (Regions 1&2,3,4,5), 05/07 (Regions 3,4,5), 05/08 (Regions 1&2,3,4,5), 05/09 (Regions 1&2,5), 05/10 (Regions 1&2,3), 05/11 (Region 3), 05/12 (Region 5), 05/13 (Region 3). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.09	0.04	0.06	0.07
Median Rate*	0.00	0.07	0.00	0.04	0.05

* Per 100,000 Residents

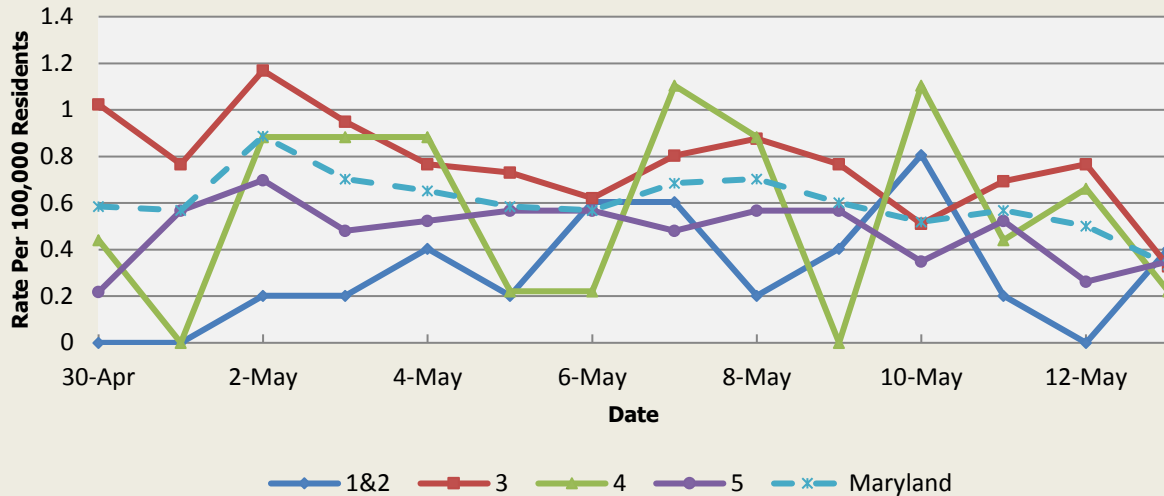


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 05/01 (Region 3), 05/02 (Regions 1&2,3), 05/03 (Region 5), 05/05 (Region 5), 05/06 (Regions 3,5), 05/07 (Region 5), 05/08 (Region 3), 05/09 (Regions 1&2), 05/10 (Regions 3,4), 05/11 (Regions 3,4), 05/12 (Regions 1&2), 05/13 (Regions 1&2). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.13	0.03	0.09	0.10
Median Rate*	0.00	0.04	0.00	0.04	0.05

* Per 100,000 Residents

**Emergency Department Chief Complaints for Lymphadenitis Syndrome
Rate Per 100,000 Residents**



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 05/02 (Regions 3,4,5), 05/03 (Region 4), 05/04 (Region 4), 05/07 (Region 4), 05/08 (Region 4), 05/10 (Regions 1&2,4). These increases are not known to be associated with any outbreaks.

**Lymphadenitis Syndrome Baseline Data
January 1, 2010 - Present**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.52	0.35	0.32	0.41
Median Rate*	0.20	0.40	0.22	0.26	0.33

* Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

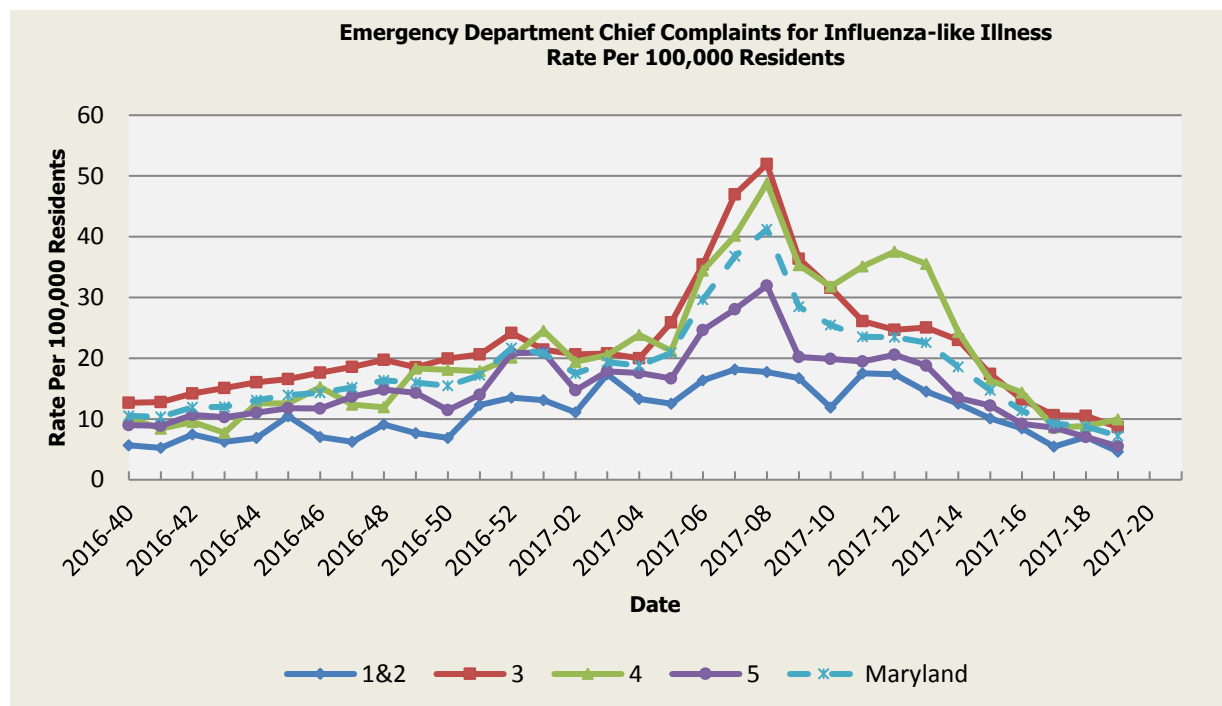
Condition	Counts of Reported Cases†					
	May			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Aseptic meningitis	6	15.4	15	86	133.2	130
Meningococcal disease	0	0	0	2	2.8	2
Measles	0	0	0	1	2.6	1
Mumps	0	1.6	0	15	29	4
Rubella	0	0	0	1	2	2
Pertussis	4	11	10	72	109.2	105
Foodborne Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Salmonellosis	18	27.6	27	187	226.4	211
Shigellosis	5	7	4	70	69.2	76
Campylobacteriosis	16	27.4	27	209	212.2	211
Shiga toxin-producing Escherichia coli (STEC)	5	4.4	4	43	37.2	34
Listeriosis	0	0.4	0	8	3.2	3
Arboviral Diseases	2017	Mean*	Median*	2017	Mean*	Median*
West Nile Fever	0	0.4	0	0	1	0
Lyme Disease	79	104	95	752	664.8	581
Emerging Infectious Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Chikungunya	0	0	0	0	1.6	0
Dengue Fever	0	0.8	1	4	8.8	8
Zika Virus***	0	0.4	0	1	3.6	1
Other	2017	Mean*	Median*	2017	Mean*	Median*
Legionellosis	2	6.2	6	48	42.6	42

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health and Mental Hygiene; 2017. † Counts are subject to change *Timeframe of 2011-2017**Includes January through current month.

*** As of May 17, 2017, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2017 is 24.

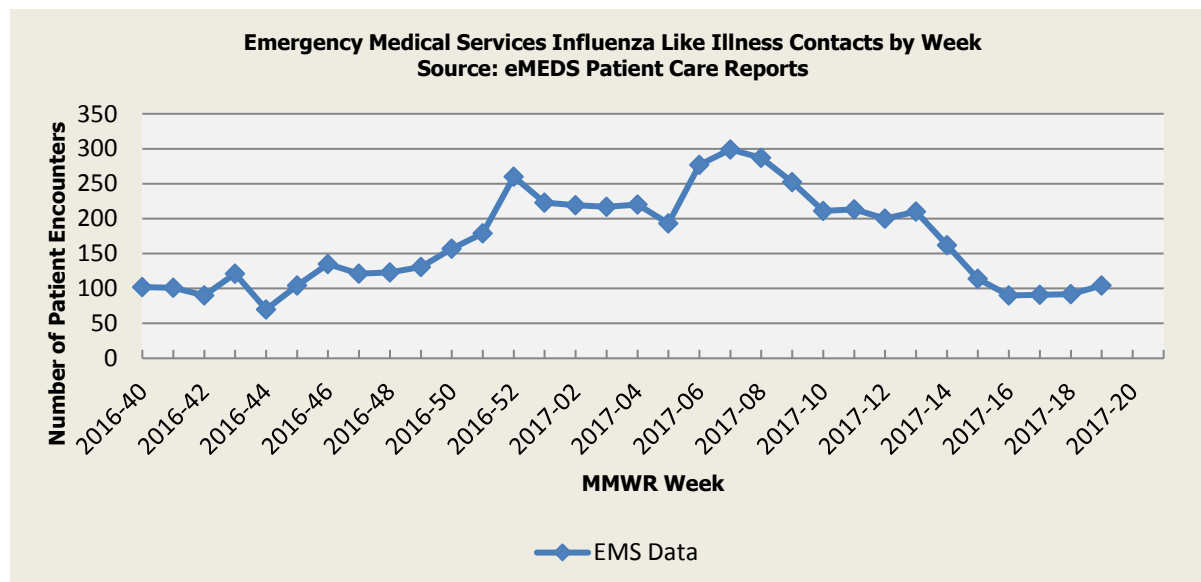
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 41 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 19 was: Sporadic Geographic Spread with Minimal Intensity.



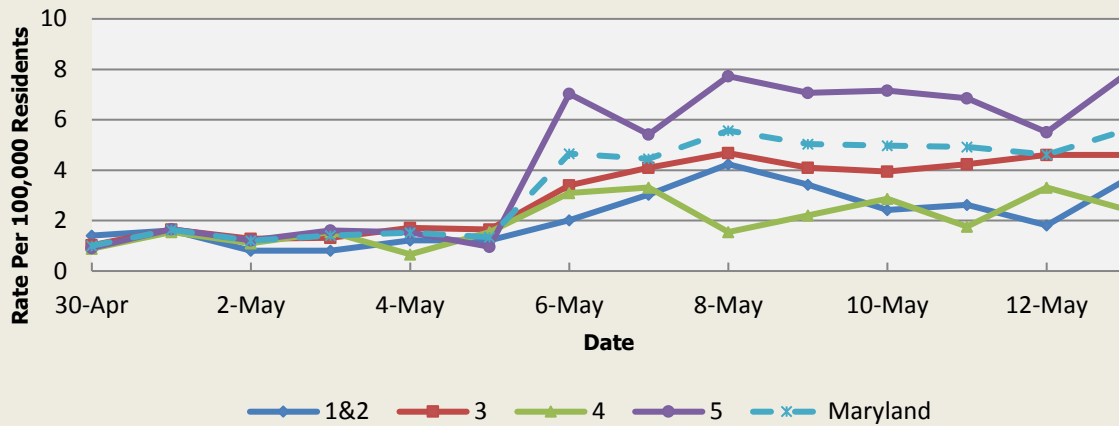
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	207.15	276.66	253.84	239.93	255.09
Median Rate*	7.66	9.63	9.05	8.51	9.00

* Per 100,000 Residents



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

**Over-the-Counter Medication Sales Related to Influenza
Rate Per 100,000 Residents**

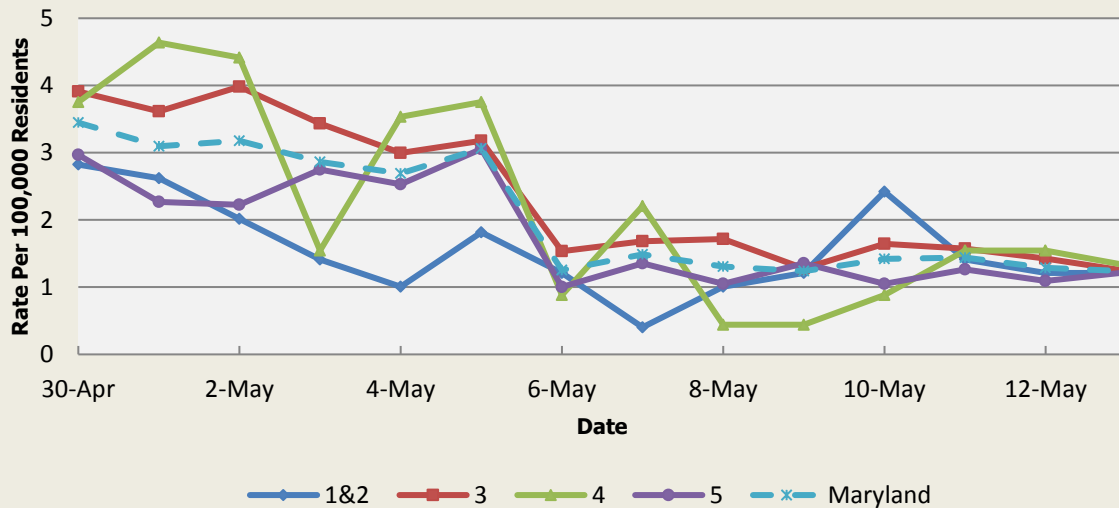


There was not an appreciable increase above baseline in the rate of OTC medication sales during this reporting period.

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.77	4.91	2.73	8.45	6.01
Median Rate*	3.23	4.38	2.43	8.03	5.52

* Per 100,000 Residents

**Over-the-Counter Thermometer Sales
Rate Per 100,000 Residents**



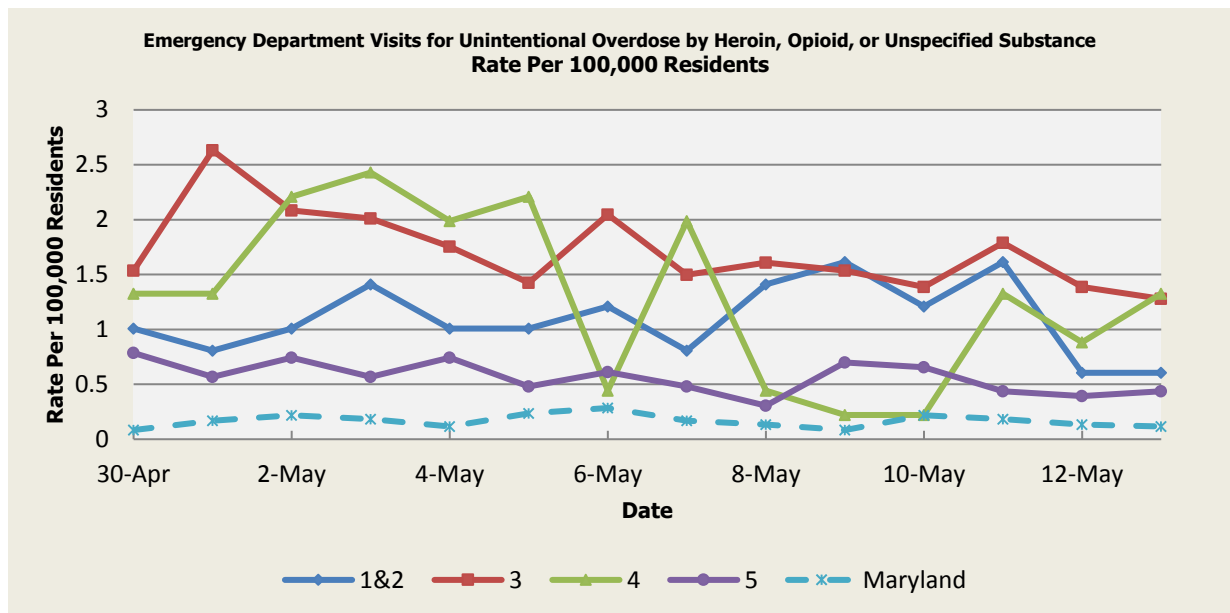
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.37	3.23	2.50	4.32	3.61
Median Rate*	3.02	3.03	2.43	4.06	3.36

* Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

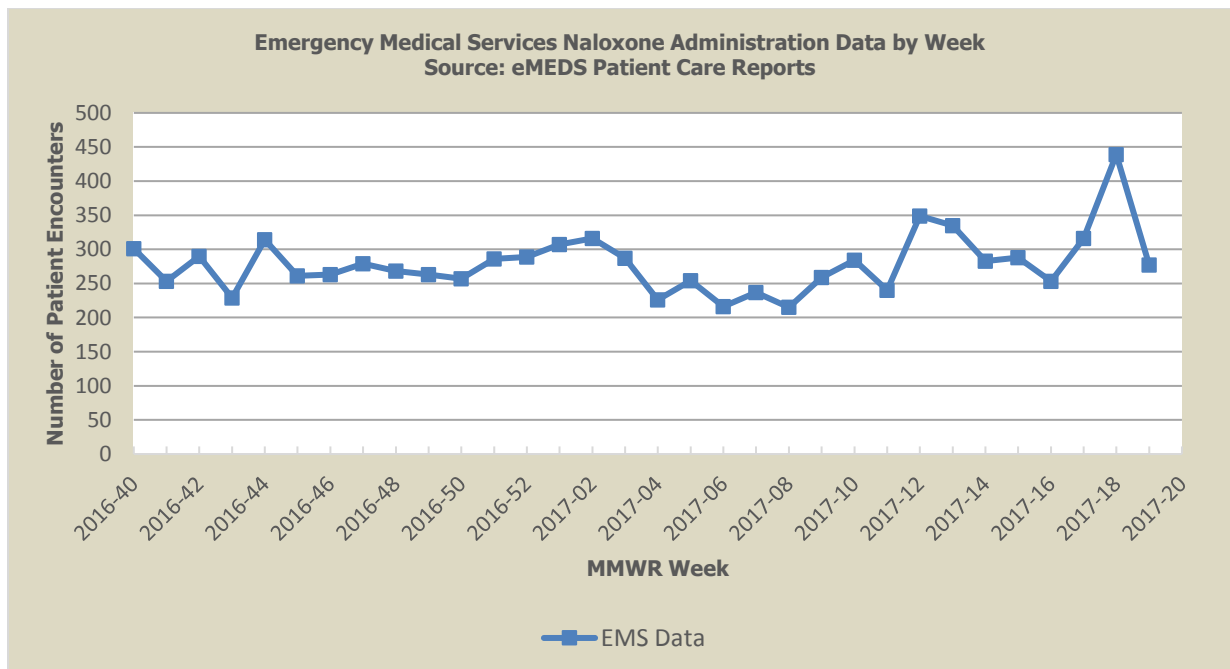
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that the majority of fatal overdoses are Opioid-related.



Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.33	0.42	0.37	0.15	0.30
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of April 20, 2017, the WHO-confirmed global total (2003-2016) of human cases of H5N1 avian influenza virus infection stands at 858, of which 453 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA:

H5 (RUSSIA): 13 May 2017, The Federal Service for Veterinary and Phytosanitary Surveillance reports on the registration of avian influenza in the territory of the Republic of Tatarstan. As a result of laboratory studies carried out by FGBU "VNIIZH", the genome of the avian influenza virus of the subtype H5 was isolated in a pathological material selected from poultry kept in LLC "Pticecomplex Laishevsky" Read More: <http://www.promedmail.org/post/5034190>

HPAI H5N8 AVIAN INFLUENZA (SOUTH KOREA): 15 May 2017, 40 HPAI H5N8 outbreaks were reported for the period from February to April 2017 in the provinces of South Chungcheong (7 outbreaks), North Jeolla (16 outbreaks) and South Jeolla (17 outbreaks). The species and type of production facilities affected were duck farms (breeding and meat type), chicken farms (layers, broilers and breeders), and one goose farm. Read More: <http://www.promedmail.org/post/5037395>

HUMAN AVIAN INFLUENZA:

H7N9 AVIAN INFLUENZA (CHINA): 14 May 2017, Henan province reported 2 human H7N9 AIV cases in Zhumadian city between 5-12 May 2017. The 57-year-old male patient, a resident of Yicheng district of Zhumadian city, had history of heart disease and died. The 60-year-old female patient, a resident of Queshan county of Zhumadian city, was in serious condition and remained in hospital for treatment. Read More: <http://www.promedmail.org/post/5030458>

H7N9 AVIAN INFLUENCE (CHINA): 17 May 2017, Eleven new cases of human avian influenza has been reported in Sichuan province, one case in Hebei province, one case in Shanxi province, and 29 cases in Beijing (11 local cases, and 8 importations). Read More: <http://www.promedmail.org/post/5041644>

NATIONAL DISEASE REPORTS

HEPATITIS C (USA): 13 May 2017, The heroin epidemic is driving up hepatitis C infections, with the biggest increase in people in their 20s. The number of new infections nearly tripled in 5 years, to about 2400 in 2015. The virus is spread by sharing needles to inject drugs, and the increase coincided with a surge in heroin use. But officials at the Centers for Disease Control and Prevention think the reported infections are only a fraction of the actual number. Most people don't get sick for many years, so they

aren't tested and don't know they are infected. Read More: <http://www.promedmail.org/post/5034250>

POWASSAN VIRUS ENCEPHALITIS (NEW HAMPSHIRE): 15 May 2017, Although there have been only 2 cases confirmed by the Centers for Disease Control in New Hampshire, Powassan virus, spread by ticks, as is Lyme disease, is of great concern to health professionals. According to information on the CDC website, Powassan, also called POW is one of a group of arthropod-borne viruses (arboviruses) that can cause inflammation of the brain (encephalitis). Statistics on the site show that between 2006 and 2015, Massachusetts had 8 cases, Maine had 2 and New Hampshire had one. Read More: <http://www.promedmail.org/post/5037030>

INTERNATIONAL DISEASE REPORTS

HANTAVIRUS (CHILE): 13 May 2017, A woman died after being infected with hantavirus in the Quemadas sector, in the Puerto Montt city. The Ministry of Health confirmed that now there are 11 cases in the Los Lagos region. The woman had been living in an area that is habitat of the rodent that may well have been the source of her infection. The other cases also may have been due to exposure to rodent reservoir hosts of the virus or to virus-contaminated rodent excreta in this environment. Cases of human hantavirus infections occur fairly frequently in this endemic region. Read more: <http://www.promedmail.org/post/5032682>

LASSA FEVER (NIGERIA): 13 May 2017, In a follow-up on the Lassa fever outbreak affecting several states in Nigeria, the Nigeria Centre for Disease Control (NCDC) reports 68 Lassa fatalities since the outbreak began in mid-December 2016 through 28 April 2017. In the current Lassa Fever outbreak, 16 States (Ogun, Bauchi, Plateau, Ebonyi, Ondo, Edo, Taraba, Nasarawa, Rivers, Kaduna, Gombe, Cross-River, Borno, Kano, Kogi and Enugu) have reported at least one confirmed case. In total, 164 Lassa cases have been reported with 149 cases being confirmed. Read More: <http://www.promedmail.org/post/5033800>

YELLOW FEVER (BRAZIL): 13 May 2017, According to Ministry of Health, at least 259 people have died from yellow fever in Brazil in the year 2017 and mostly in the southeast from the country. And now there is increase in number of confirmed cases to 756, while another 622 potential cases are being studied by the health authorities. *The Aedes aegypti* mosquito, which is the same vector for Zika, dengue, and chikungunya transmits the disease. Read More: <http://www.promedmail.org/post/5034249>

MERS-CoV (SAUDI ARABIA): 14 May 2017, There were 8 new confirmed cases and four deaths associated with coronavirus. Two more cases were reported by MOH on 17 May 2017. Read More: <http://www.promedmail.org/post/5032286>

ANTHRAX (KENYA): 13 May 2017, Six cases of anthrax are admitted to Thika Level 5 Hospital. Read More: <http://www.promedmail.org/post/5035734>

CHIKUNGUNYA (BANGLADESH): 15 May 2017, Mosquito-borne chikungunya is spreading [in Dhaka, the capital city in Bangladesh]. The disease is transmitted by biting *Aedes albopictus* and *Aedes aegypti* mosquitoes. Many people in the capital city, Dhaka, have been known to be affected with the disease this summer. The disease was first reported in Bangladesh in the districts of Rajshahi and Chapainawabganj in 2008. Read More: <http://www.promedmail.org/post/5037500>

YELLOW FEVER, VIRUS MUTATIONS (BRAZIL): 16 May 2017, Researchers from the Oswaldo Cruz Institute have discovered that the virus from the latest outbreak of yellow fever in Brazil -- the largest since the Health Ministry began record keeping -- has a genetic sequence that has never been encountered before. Motivated by the extent of the current epidemic, they performed a complete genetic sequencing of the genome of the virus and discovered 8 mutations that had never been seen before in some of the genetic sequences. Of the variations, 7 impact the formation of proteins involved in the replication of the virus, part of the process that allows the virus to inflict the disease. Read More: <http://www.promedmail.org/post/5040265>

MEASLES (PAKISTAN): 16 May 2017, It has been reported that during the past week, measles has claimed the lives of at least 8 children in Balochistan's Killa Abdullah district. The number of children affected by the disease is increasing, as the measles virus spreads through the air when a patient coughs or sneezes. Opposition to vaccination is an obvious reason for the spread of the disease. A serious outbreak of measles in Balochistan and elsewhere in the country could well be the result of a drop-off in vaccinations. The grim situation is worsening in different cities of the province due to lack of healthcare facilities and delayed diagnosis. Read More: <http://www.promedmail.org/post/5039511>

VARICELLA (PAKISTAN): 17 May 2017, It Punjab is in the midst of a chickenpox epidemic as at least 19 deaths have been reported from Faisalabad's hospitals thus far in 2017. According to the health department, 1591 cases of chickenpox have been reported in Punjab, of which 821 were from Faisalabad district alone. In Lahore, 86 cases were reported, while there were 6 in Chinot, 11 in Nankana Sahib, 189 in Toba Tek Singh and 185 in Sahiwal. In Gujranwala and Multan, one case from each city was reported. Read More: <http://www.promedmail.org/post/5042905>

KYASANUR FOREST DISEASE (INDIA): 17 May 2017, The Kyasanur Forest Disease (KFD), commonly known as the monkey fever, has claimed 11 lives. All the victims were from Sindhudurg district and succumbed to the viral infection between January and May 2017. The Forest department has also been asked to step up and get involved in controlling the outbreak of KFD in the district. As soon as monkey carcasses are spotted, they are cremated immediately to stop spread of infection. Blood samples of some of the monkeys are also sent to NIV in Pune. Read More: <http://www.promedmail.org/post/5041642>

HEPATITIS C (TAIWAN): 17 May 2017, The reuse of syringes at a Taoyuan clinic to treat hepatitis C patients may have spread the disease to an estimated 1200 patients. The ministry investigated the incident after 5 hepatitis C cases emerged at Weilian Clinic in Taoyuan City. It later determined that needles used to administer treatment for the 5 infected patients were not disposed of but used repeatedly, possibly infecting 1200. The incident represents the first iatrogenic cluster of the disease in Taiwan. Read More: <http://www.promedmail.org/post/5042859>

EBOLA (DEMOCRATIC REPUBLIC OF CONGO): 19 May 2017, The World Health Organization reports the number of suspected cases of Ebola has risen to 29 from 9 in less than a week in an isolated part of Democratic Republic of Congo, where 3 people have died from the disease since 22 Apr 2017. Read More: <http://www.promedmail.org/post/5047049>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the DHMM website:
<http://phpa.dhmm.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.dhmm.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

